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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,424	07/25/2003	Mark Bender	P03,0267	2348
26574	7590	03/10/2005	EXAMINER	
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			BLAKE, CAROLYN T	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/627,424	BENDER, MARK	
	Examiner	Art Unit	
	Carolyn T Blake	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - Page 1, line 11: "it is also know" should be changed to - -it is also known- -.
 - Page 4, line 24: "spacing between each, slot" should be changed to - -spacing between each slot- -.
 - Page 5, line 10: "punch is show" should be changed to - -punch is shown- -.

Appropriate corrections are required.

Claim Objections

2. Claim 16 is objected to because of the phrase "the die station" (line 4) lacks proper antecedent. Appropriate correction is required.
3. Claim 16 is objected to because "different then the slot distance" (lines 7-8) should be changed to - -different than the slot distance- -.
4. Claim 17 is objected to because of the phrase "the die station" (line 5) lacks proper antecedent. Appropriate correction is required.
5. Claim 17 is objected to because "different then the slot distance" (lines 8-9) should be changed to - -different than the slot distance- -.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 10, 11, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Daley (1,962,431).

Regarding claim 1, Daley discloses a method for manufacturing a straight strip lamination (5) with a press, comprising the steps of: providing in the press a die (18) comprising a main slot punch (39), a separator punch (72), and a part feature punch (40); activating the main slot punch (39) and separator punches (72) and deactivating the part feature punch (40), with each strike of the press, feeding a strip (15) into the die a first same step distance and repeatedly stamping with the main slot punch (39) and the separator punch (72) to create a plurality of slots with punched-out separations there between having a desired constant slot distance progression; deactivating the main slot punch (39) and the separator punch (72) and activating the part feature punch (40), and feeding the strip (15) into the die (18) with a second step distance different than said first step distance and stamping with the part feature punch (40) so as to create at least one part feature in said strip (15); and deactivating the part feature punch (40) and reactivating the slot punch (39) and the separator punch (72) and feeding the strip (15) into the die (18) with a third step distance equal to a difference between said first and second step distances, and stamping with the slot (39) and separator punches (72). See col. 4, lines 132-136 and col. 6, lines 136-150.

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Regarding claim 2, Daley discloses feeding the strip (15) with said first same step distance and stamping with the slot (39) and separator (72) punches.

Regarding claim 10, Daley discloses the step of providing the slot punch (39) so that teeth are formed in two parallel strips.

Regarding claim 11, Daley discloses the step of providing the die beginning at a strip entrance end with the slot punch (39), followed by the part feature punch (40). Which is then followed by the separator punch (72).

Regarding claim 16, Daley discloses a method for manufacturing a straight strip lamination with a press comprising the steps of: providing in the press a die (18) having at least a slot punch (39) and a part feature punch (40); activating the slot punch (39) and feeding the strip (15) into the die (18) with a constant slot distance to create a plurality of slots; and when a part feature is to be punched, deactivating the slot punch (39), activating the part feature punch (40), and feeding the strip (15) with a new step distance which is different than the slot step distance.

Regarding claim 17, Daley discloses a method for manufacturing a straight strip lamination with a press, comprising the steps of:

- a) providing in the press a die (18) having at least a slot punch (39) and a part feature punch (40);

- b) activating the slot punch (39) and feeding the strip (15) in the die (18) with a constant slot step distance progression to create a plurality of slots;

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c) when a feature is to be punched, deactivating the slot punch (39), activating the part feature punch (40), and feeding the strip (15) with a new step distance which is different than the slot step distance; and

d) repeating steps b) and c) to create a pattern of clots and part features wherein progression of the part feature step distances is not evenly divisible by a progression of the slot step distances.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daley as applied to claim 1 above, and further in view of Raschbichler (4,728,382).

Regarding claims 3-5 and 9, Daley fails to disclose a cut off end contour punch and producing motor straight strip laminations. However, Raschbichler discloses a method for manufacturing a straight strip lamination wherein the punch comprises a cut off end contour punch. See contour end (18') in FIG 2. The cut off end contour is an important feature of the motor straight strip laminations produced by the punch. In addition, the attributes of the strip lamination are located at different distances from one another, and thus would require different step distances. Like the work product disclosed by Daley, the

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Raschbichler work product is made from straight strip lamination and includes several slots and other features. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Daley method to create a different work product, such as the motor strip lamination disclosed by Raschbichler, because both work products are manufactured from straight strip lamination and include several slots and features. In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a cut off end contour punch and to have the fourth step distance different from the first, second, and third step distances, as disclosed by Raschbichler, with the Daley method for the purpose of manufacturing motor straight strip laminations.

Regarding claim 6, Daley fails to disclose the part feature is a T-slot. However, Raschbichler discloses the part feature is a T-slot (23). The T-slot is a key feature on the motor strip lamination produced by the Raschbichler method. Like the work product disclosed by Daley, the Raschbichler work product is made from straight strip lamination and includes several slots and other features. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Daley method to create a different work product, such as the motor strip lamination with a T-slot disclosed by Raschbichler, because both work products are manufactured from straight strip lamination and include several slots and features.

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10. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daley as applied to claim 1 above, and further in view of Applicant's admitted prior art (hereafter, AAPA).

Regarding claim 7, Daley fails to disclose pinch rollers and a servomotor. However, AAPA discloses pinch rollers and a servomotor are useful in advancing the strip to be punched. See page 4, lines 12-22 of the disclosure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide pinch rollers and a servomotor, as disclosed by AAPA, with the Daley method for the purpose of advancing the strip to be punched.

Regarding claim 18, Daley discloses a method for manufacturing a straight strip lamination with a press, comprising the steps of: providing in a press a die (18) having a direction of strip feed at least a slot punch (39), flowed by a part feature punch (40), which is followed by a separator punch (72); and punching out the straight strip lamination by use of said die (18). Daley fails to disclose a servomotor. However, AAPA discloses a servomotor is useful in advancing the strip to be punched. See page 4, lines 12-22 of the disclosure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a servomotor, as disclosed by AAPA, with the Daley method for the purpose of advancing the strip to be punched.

11. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daley as applied to claim 1 above, and further in view of Raschbichler and Asao et al (6,147,431). Daley fails to disclose coiling the strip.

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As mentioned above, Raschbichler discloses a method for manufacturing a straight strip lamination for a motor. Like the work product disclosed by Daley, the Raschbichler work product is made from straight strip lamination and includes several slots and other features. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Daley method to create a different work product, such as the motor strip lamination disclosed by Raschbichler, because both work products are manufactured from straight strip lamination and include several slots and features. The Daley-Raschbichler combination still fails to disclose coiling the strip. However, Asao et al disclose the step of coiling a strip. See col. 1, lines 29-30. Coiling the strip allows the strip to be used on a stator case and implemented in a motor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the step of coiling a strip, as disclosed by Asao et al, with the Daley-Raschbichler combination for the purpose of implementing the strip in a motor.

12. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daley as applied to claim 11 above, and further in view of Raschbichler. Daley fails to disclose a cut-off end contour punch. However, Raschbichler discloses a method for manufacturing a straight strip lamination wherein the punch comprises a cut off end contour punch, separator punch portion, and a part feature portion. See contour end (18') and part feature (20) in FIG 2. The attributes mentioned are important features of the motor straight strip laminations produced by the punch. Like the work product disclosed by Daley, the

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Raschbichler work product is made from straight strip lamination and includes several slots and other features. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Daley method to create a different work product, such as the motor strip lamination disclosed by Raschbichler, because both work products are manufactured from straight strip lamination and include several slots and features. In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a cut off end contour punch with separator and part feature portions, as disclosed by Raschbichler, with the Daley method for the purpose of manufacturing motor straight strip laminations.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schwennesen (3,213,727 and 3, 456,535), Small (3,491,437), Hirai et al (3,715,943), Schlegel (5,333,525), Jenkins et al (5,406,243), Steiner (5,604,971), Nakahara et al (5,859,486), and Neuenschwander (6,131,268) disclose method for manufacturing straight strip laminations.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T Blake whose telephone number is (571) 272-4503. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on (571) 272-4514. The

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fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CB

March 4, 2005



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